

**SPECIFICATION AMENDMENTS**

Kindly amend the original filed specification as follows.

Please replace the paragraph/section beginning at page 5, line 11, with the following rewritten paragraph:

Fig. 5A illustrates a first an alternative mode of the lock assembly according to the above first preferred embodiment of the present invention, illustrating the locking serrations of the key having different sections for unlocking the first and second lock rotors respectively.

Kindly delete the section paragraph/section beginning at page 5, line 14 as follows.

Fig. 5B illustrates a second alternative mode of the lock assembly according to the above first preferred embodiment of the present invention.

Please replace the paragraph/section beginning at page 5, line 20, with the following rewritten paragraph:

~~Fig. 8 is an exploded perspective view of a lock assembly~~ illustrates an operation of the lock assembly according to a third ~~the above second preferred embodiment of the present invention.~~

Please replace the paragraph/section beginning at page 5, line 22, with the following rewritten paragraph:

~~Fig. 9 is a front view of the lock assembly according to the above third preferred embodiment of the present invention~~ Figs. 9A and 9B illustrate the protection of the lock assembly according to the above second preferred embodiment of the present invention.

Please add the paragraph/section after line 25 in page 7 as follows:

It is worth to mention that the lock cover 110 is securely mounted at the lock sleeve 11 wherein only the first and second lock rotors 13, 14 can be rotated within the

lock sleeve 11. In other words, the lock cover 110 forms as a third lock rotor affixed to the lock sleeve 11 to protect the first and second lock rotors 13, 14.

Please replace the paragraph/section beginning at page 9, line 21, with the following rewritten paragraph:

As shown in Fig. 5A, another alternative of the key is illustrated, wherein the locking serrations 22B of the key head 21B has a longitudinal head serrate section 221B and a longitudinal tail serrate section 222B integrally extended therefrom, wherein the locking serrations 22B within the head serrate section 221B of the key head 21B are arranged to engage with the respective lock pins 17B to pull the respective tumblers 12B within the first locking holes 132B respectively to unlock the rotational movement of the first lock rotor 13 and the locking serrations 22B within the head and tail serrate sections 221B, 222B of the key head 21B are arranged to engage with the respective lock pins 17B to pull the respective tumblers 12B within the second locking holes 142B respectively to unlock the rotational movement of the second lock rotor 14B.

Please delete the paragraph/section beginning at page 10, line 13 as follows:

Fig. 5B illustrates a second alternative mode of the lock assembly, wherein the length of the first lock rotor 13C is shorter than that of the second lock rotor 14C. As shown in Fig. 5B, there are two first locking holes 132C formed on the first lock rotor 13C and there are five second locking holes 142C formed on the second lock rotor 14C.

Please delete the paragraph/section beginning at page 10, line 17 as follows:

Accordingly, the locking serrations 22C within the head serrate section 221C of the key head 21C is arranged to engage with the respective lock pins 17C to pull the respective tumblers 12C within the first locking holes 132C respectively to unlock the rotational movement of the first lock rotor 13C and the locking serrations 22C within the head and tail serrate sections 221C, 222C of the key head 21C are arranged to engage with the respective lock pins 17C to pull the respective tumblers 12C within the second

locking holes 142C respectively to unlock the rotational movement of the second lock rotor 14C.

Please delete the paragraph/section beginning at page 10, line 24 as follows:

Therefore, when unlocking the first lock rotor 13C, only the head serrate section 221C of the key head 21C is inserted into the first keyway 131C. However, when unlocking the second lock rotor 14C, the key head 21C must be entirely inserted into the second keyway 141C. In other words, the locking serrations 22C within the head serrate section 221C of the key head 21C is capable of not only fittedly engaging with the lock pins 17C within the first locking holes 132C respectively but also fittedly engaging with the lock pins 17C within the second locking holes 142C at a head portion of the second lock rotor 14C.

Please replace the paragraph/section beginning at page 12, line 19, with the following rewritten paragraph:

As shown in Figs. 6 and 7, a lock assembly of a second embodiment illustrates an alternative mode of the first embodiment of the present invention, wherein the lock assembly, which is disposed within a knob body, comprises a lock cylinder 10' for actuating a latch assembly and a key 20'. The lock cylinder 10', which is preferably made of metal such as stainless steel, comprises a lock sleeve 11', a plurality of tumblers 12', a lock rotor assembly 101', a protective rotor 16', and a plurality of resilient elements 15'.

Please replace the paragraph/section beginning at page 13, line 4, with the following rewritten paragraph:

~~The lock rotor assembly 101' comprises a lock rotor 13' rotatably and coaxially fitted in the axial rotor hole 111' of the lock sleeve 11' to define a keyway 131' therethrough. The lock rotor 13' has a plurality of locking holes 132' radially distributed on an outer circumferential surface of the lock rotor 13', wherein each of the locking holes 132' is capable of coaxially aligning with the tumbler sockets 112' respectively.~~

~~The lock rotor assembly 101' further comprises a plurality of lock pins 17' disposed in the locking holes 132' respectively.~~ The lock rotor assembly 101' comprises a first lock rotor 13', a second lock rotor 14', and a plurality of lock pins 17'. The first lock rotor 13', having a tubular shaped, is rotatably and coaxially fitted in the axial rotor hole 111' of the lock sleeve 11' to define a first keyway 131' therethrough. The first lock rotor 13' has a plurality of first locking holes 132' radially distributed on an outer circumferential surface of the first lock rotor 13', wherein each of the first locking holes 132' is capable of coaxially aligning with the first tumbler sockets 112' respectively. Accordingly, the first keyway 131' is radially extended from a center of the first lock rotor 13'. The second lock rotor 14', having a tubular shaped, is rotatably and coaxially fitted in the axial rotor hole 111' of the lock sleeve 11' to define a second keyway 141' therethrough wherein the second keyway 141' is normally misaligned with the first keyway 131' so as to block up an arrangement of the tumblers 12' within the first locking holes 132' of the first lock rotor 13'. The second lock rotor 14' has a plurality of second locking holes 142' radially distributed on an outer circumferential surface of the second lock rotor 14', wherein each of the first locking holes 142' is capable of coaxially aligning with the second tumbler sockets 113' respectively. Accordingly, the second keyway 141' is radially extended from a center of the second lock rotor 14'. The lock pins 17' are coaxially placed in the first and second locking holes 132', 142' respectively, wherein the lock pins 17' are preferred to have different heights so as to provide a unique locking permutation of the lock assembly.

Please replace the paragraph/section beginning at page 13, line 11, with the following rewritten paragraph:

Accordingly, each of the first and second lock rotor 13', 14' further has a pin seat 133', 143' provided in each of the first and second locking holes 132', 142' such that the lock pin 17' can only sit on the pin seats 133', 142' within the first and second locking holes 132', 142' respectively without sliding into the first and second keyway 131', 141' respectively.

Please replace the paragraph/section beginning at page 13, line 19, with the following rewritten paragraph:

The resilient elements 15', which are compression springs according to the preferred embodiment, are coaxially disposed in the first and second tumbler sockets 112', 113' respectively for applying urging pressures on the tumblers 12' to move inwardly towards the first and second locking holes 132', 142' until an inner portion of each of the tumblers 12' is disposed in the respective first and second locking hole 132', 142' and an outer portion of the tumbler 12' is disposed in the respective first and second tumbler socket 112', 113' so as to lock up the rotational movements of the first and second lock rotor 13', 14' within the lock sleeve 11'.

Please add the paragraphs/sections after line 24 in page 13 as follows:

It is worth to mention that the numbers of the first locking holes 132' does not have to be the same number of the second locking holes 142'. As shown in Fig. 7, there are two first locking holes 132' formed on the first lock rotor 13' while there are four second locking holes 142' formed on the second lock rotor 14'. In addition, the length of the first lock rotor 13' may not be the same as the length of the second lock rotor 14' according to the arrangement of the first and second locking holes 132', 142'.

The lock cylinder 10' further comprises a lock cover 110' coaxially mounted on an entrance of the axial rotor hole 111' of the lock sleeve 11' to retain the lock rotor assembly 101' within the lock sleeve 11', wherein the lock cover 110' has a key access slot 1101', having a predetermined length, coaxially formed thereon wherein the key access slot 1101' is normally aligned with the first keyway 131' of the first lock rotor 13 in such a manner that the key 20' is adapted to insert into the first keyway 131 through the key access slot 1101'. Accordingly, the first lock rotor 13' is blocked by the lock cover 110', so as to prevent the first and second lock rotors 13', 14' from sliding out from the axial rotor hole 111' of the lock sleeve 11'.

As shown in Fig. 7, the lock cover 110' comprises a protective cover 1102' mounted at the entrance of the lock sleeve 11' to enclose the axial rotor hole 111' and a

locker core 1103' extended from the protective cover 1102' to coaxially align with the axial rotor hole 111', wherein the key access slot 110' is extended through the protective cover 1102' and the locker core 1103' to align with the first keyway 131'.

It is worth to mention that the lock cover 110' is securely mounted at the lock sleeve 11' wherein only the first and second lock rotors 13', 14' can be rotated within the lock sleeve 11'. In other words, the lock cover 110' forms as a third lock rotor affixed to the lock sleeve 11' to protect the first and second lock rotors 13', 14', as shown in Figs. 9A and 9B. In other words, the lock assembly cannot be broken by inserting any elongated member into the key access slot 1101'. As shown in Fig. 9A, the elongated member is not long enough to reach the first lock rotor 13' to access the second lock rotor 14'. Even though the elongated member is long enough to reach the second lock rotor 14', the elongated member cannot access the lock pins 17' at the second lock rotor 14', so as to ensure the security function of the lock assembly.

Please replace the paragraph/section beginning at page 14, line 4, with the following rewritten paragraph:

The lock assembly further comprises a key aligning arrangement 30' for ensuring the alignment between the first and second keyways 131', 141'. The key aligning arrangement 30' having has an axial receiving groove 301' provided on an outer side of the first lock rotor 13' and two alignment indentions 302' provided on an inner side of the protective cover 1102' of the lock cover 110'. The key aligning arrangement 30' further comprises an aligning member 303', having a round head, slidably received in the axial receiving groove 301' and a compression spring 304' received in the axial receiving groove 301' for applying an urging pressure against the aligning member 303' to push the round head of the aligning member 303' to bias against the inner side of the lock cover 110' at one of the alignment indentions 302'. Accordingly, the two alignment indentions 302' are formed on the lock cover 110' at positions that when the first lock rotor 13' is in an initial position that the first keyway 131' is aligned with the key access slot 1101' and when the first lock rotor 13 is rotated to align the first keyway 131 with the second keyway 141 respectively. In other words, the aligning member 303' is biased against the

lock cover 110 at the corresponding alignment indentation 302' to retain the first lock rotor 13' at the initial position, and the aligning member 303' is biased against the lock cover 110' at the other alignment indentation 302' to retain the first lock rotor 13' when the first keyway 131' is aligned with the second keyway 141'.

Please add the paragraphs/sections after line 4 in page 14 as follows:

The key 20' further comprises an elongated key body 23', having a size smaller than a size of the first keyway 131', rearwardly extended from the key head 21' wherein when the key head 21' is inserted into the second keyway 141', the key body 23' is positioned within the first keyway 131' in such a manner that the first lock rotor 13' is not rotated while the second lock rotor 14' is driven to rotate.

The locking serrations 22' of the key head 21' has a longitudinal head serrate section 221' and a longitudinal tail serrate section 222' integrally extended therefrom, wherein the locking serrations 22' within the head serrate section 221' of the key head 21' are arranged to engage with the respective lock pins 17' to pull the respective tumblers 12' within the first locking holes 132' respectively to unlock the rotational movement of the first lock rotor 13' and the locking serrations 22' within the head and tail serrate sections 221', 222' of the key head 21' are arranged to engage with the respective lock pins 17' to pull the respective tumblers 12' within the second locking holes 142' respectively to unlock the rotational movement of the second lock rotor 14'.

A length of the head serrate section 222' of the key head 21' is equal to a length of the first keyway 131' and a total length of the head and tail serrate sections 221', 222B of the key head 21' is equal to a length of the second keyway 141'. In other words, the length of the first keyway 131' is shorter than that of the second keyway 141'. Preferably, the length of the head serrate section 221' is longer than that of the tail serrate section 222', wherein a pattern of the locking serrations 22' within the tail serrate section 222' is repeated within a portion of the head serrate section 221'. However, it is not limited that when the length of the head serrate section 221' is shorter than that of the tail serrate

section 222', wherein a pattern of the locking serrations 22' within the head serrate section 221' is repeated within a portion of the tail serrate section 222'.

In order to operate the lock assembly, the key 20' must be inserted into the first keyway 131' of the first lock rotor 13' through the key access slot 1101' of the lock cover 110' until the key head 21' is pushed to reach an outer wall 140' of the second lock rotor 14', as shown in Fig. 8. Then, the first lock rotor 13' must be rotated by the key 20' until the first keyway 131' is aligned with the second keyway 141' such that the key head 21' is capable of inserting into the second keyway 141' so as to rotate the second lock rotor 14', as shown in Fig. 8. It is worth to mention that the Fig. 8 mainly illustrates the alignment between the key access slot 1101', the first keyway 131', and the second keyway 141' that the key head 21' is slidably inserted therein, such that other elements, such as tumblers 12', are omitted in the Fig. 8.

Please delete the paragraph/section beginning at page 14, line 13 as follows:

The key aligning arrangement 30' further comprises a protrusion 31' outwardly extended from the key 20' and first, second, and third indicators 32', 33', 34' provided at an opening of the lock cylinder 10', wherein the operation of the key aligning arrangement 30' is the same as mentioned above in the first embodiment.

Please delete the paragraph/section beginning at page 14, line 17 as follows:

It is obvious that the lock rotor assembly 101' of the second embodiment can be simply substituted by the lock rotor assembly 101 of the first embodiment, wherein the protective rotor 16' must be rotated by the key head 21' until the key slot 161' is aligned with the first keyway 131 such that the key head 21' is adapted to insert into the first keyway 131 and then by aligning the first keyway 131 with the second keyway 141, the latch assembly 1' can be unlocked. In other words, the lock assembly can be simply modified to combine the first and second embodiments together so as to further enhance the security function of the lock assembly of the present invention.

Please delete the paragraph/section beginning at page 14, line 25 as follows:

As shown in Fig. 8, a lock assembly of a third embodiment illustrates an alternative mode of the first embodiment of the present invention, wherein the components of the third embodiment are the same as shown in the first embodiment, except the shapes of the key 20" and the first and second keyways 131", 141".

Please delete the paragraph/section beginning at page 15, line 1 as follows:

According to the third embodiment, the arrangement of the tumblers 12" is not limited to one or two opposing rows. The lock assembly can include any possible number of tumblers 12" aligned around anywhere of the entire cylindrical surfaces of the key 20" and the first and second keyways 131", 141" correspondingly, so as to provide more locking permutations and combinations to ensure the security function of the lock assembly.

Please delete the paragraph/section beginning at page 15, line 6 as follows:

The key 20" has at least two radial protrusions 211" radially extended from the key head 21" at predetermined radial directions respectively wherein the serrations 22" are formed on each radial protrusion 211". Each of the first and second keyways 131", 141" has a corresponding cross section that the key head 21" is adapted to fittedly insert therethrough, wherein the first and second locking holes 132", 142" are selectively aligned on each radial protrusion 211" of the key head 21" in such an axial and radial positions so that the serrations 22" of the key head 21" are adapted to engage with the lock pins 17" to pull the tumblers 12" in the lock cylinder 10" in the radial directions.

Please delete the paragraph/section beginning at page 15, line 14 as follows:

As shown in Figs. 8 and 9, each of the first and second keyways 131", 141" has a "cross" cross section having four radial directions wherein the first and second locking holes 132", 142" are distributed on the first and second lock rotors 13", 14" respectively along the radial directions, in such a manner that the first and second lock rotors 13", 14" are locked within the lock sleeve 11" by the tumblers 12" in four radial directions. In

other the locking permutations and combinations of the lock assembly are selectively formed by the locations of the tumblers 12" to ensure the security function of the lock assembly.

Please delete the paragraph/section beginning at page 15, line 21 as follows:

The key head 21" of the key 20", having the corresponding "cross" cross sectional, has four radial protrusions 211" wherein the serrations 22" are formed on each of the radial protrusions 211" in such a manner that the key head 21" is adapted to fittedly insert into the first and second keyways 131", 141" to unlock the latch assembly 1". Accordingly, the first keyway 131" must be turned by the key head 21" to align with the second keyway 141" so that the key head 21" is allowed to insert into the second keyway 141" to unlock the latch assembly 1".

Please delete the paragraph/section beginning at page 16, line 1 as follows:

Moreover, the protective rotor 16' and the key aligning arrangement 30' of the second embodiment can be simply incorporated in the third embodiment for enhance the protection and the use of the present invention.

Please delete the paragraph/section beginning at page 16, line 4 as follows:

It is worth mentioning that the shape of the key head 21" does not limited to have four radial protrusions 211". The shape of the key head 21" can be shaped to have two radial protrusions or thee radial protrusions according to the cross section of the first and second keyways 131", 141", wherein the purpose is that the first keyway 131" must be turned to align with the second keyway 141" in order to let the key head 21" inserting into the second keyway 141". Thus, the locking permutations within the second keyway 141" is blocked by the first lock rotor 13" so that the locking permutations within the second keyway 141" cannot be seen through the first keyway 131", so as to ensure the security function of the lock assembly 1".

Please delete the paragraph/section beginning at page 16, line 13 as follows:

Therefore, the first and second keyways 131, 141, according to the first embodiment, can be embodied to have the “cross” cross section such that the first keyway 131 must be aligned with the second keyway 141 by matching the cross sections thereof to unlock the latch assembly 1. Likewise, the key slot 161' and the keyway 131', according to the second embodiment, can be embodied to have the “cross” cross section such that the key slot 161' must be aligned with the keyway 131' by matching the cross sections thereof to unlock the latch assembly 1'. In other words, the first, second, and third embodiments can be interchanged their features and modified to further ensure the security function of the lock assembly.